Upcoming Open House
Information Inside

McDowell Road Basin And Storm Drain Design

Maricopa County
Board of Supervisors
Don Stapley - District 2

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MCDOWELL ROAD BASIN AND STORM DRAIN DESIGN

Spring 2006
Newsletter #2

The Flood Control District of Maricopa County, in partnership with the City of Mesa, is in the final design stages of the McDowell Road Basin and Storm Drain project. This project is located along McDowell Road between Hawes and Sossaman roads (also known as 76th St.).

80th Street and McDowell Road Looking West

Storm Drain Considerations

The storm drain will be constructed along the south side of McDowell Road, mainly outside of the roadway, as to minimize impacts to traffic during construction. At the east end of the project, the McDowell Road storm drain will connect to an existing private drainage system at Hawes Road. A new storm drain inlet structure will be located at this private system to direct flows to the McDowell Road storm drain.

At the west end of the project, a new stormwater basin will be located at the southwest corner of Sossaman and McDowell roads. The basin will temporarily store stormwater that is directed to the basin by the storm drain.

The storm drain and outlet from the basin will connect to the existing private channel located along the north side of McDowell Road. The McDowell Road storm drain is a concrete pipe that ranges in diameter from 72 to 90 inches. Various utilities will have to be relocated as part of the construction of the storm drain. This includes underground power lines, telephone and several water lines, as well as a sanitary sewer line.

The primary purpose of this project is to collect and convey 100-year storm flows that have a one percent chance of occurring in a given year. This roughly equates to four inches of rain received within a 24-hour period. It should be noted that the stormwater basin has been designed to accommodate this type of 100-year storm event. This means that although you will not typically see water in the basin, it will be able to accommodate the water from a 100-year event, when necessary.

Many long-time residents can attest that flooding does occur in this particular area. The District strives to protect public safety and private property by identifying, designing and building projects such as this.

Public Open House

Tuesday, March 28
6:00—8:00PM
Desert Hills Baptist Church
8326 East McDowell Road

This project is in the final design phase which includes putting the last touches on the construction plans. This is the second open house held on this project and the plans reflect input received at the first meeting. Public input is invited and encouraged.

The design phase will wrap-up early this summer. A contractor will be brought on board to begin construction, tentatively scheduled for early 2007. Since this project is in the final design phase, we know some of the construction details. There will be traffic impacts which will be minimized by the requirements placed on the contractor. One lane of traffic will remain open in each direction for most of the project construction. Access to residences, churches and the fire station will be a top priority. Dust and noise, which cannot completely be eliminated during construction such as this, will also be controlled by requirements placed on the contractor. If you have specific questions or concerns, we will take note of them at this open house and will address them as the project continues.

82nd Street and McDowell Road Looking East

Spook Hill Area Drainage Master Plan

The project is being designed as part of the Spook Hill Area Drainage Master Plan (ADMP) study which was completed by the District in 2002. The ADMP was completed with comprehensive input from a Citizens Committee formed by the City of Mesa. Public involvement played a key role in ensuring that the master plan was completed with the understanding and cooperation of residents in the surrounding neighborhood.

The ADMP provided a recommended drainage master plan that met four key criteria:

- No impact to the Usery Mountain Park
- Cost-effective
- Maximize flood protection
- No displacement of homes or businesses

This is the first of the ADMP-identified projects to be designed and implemented in accordance with the ADMP guidelines. There will be other projects to follow which will result in a regional master planned drainage system.

The **Hermosa Vista/Hawes Road Project** includes a drainage system to capture runoff from the Usery Mountains and surrounding area. The drainage system will consist of a storm drain that will tie into the existing Madrid Basin at 90th St. and McDowell Road, go west along McDowell, south along Hawes Road and west along Hermosa Vista Dr. The project also includes a stormwater basin at Hawes Road and Culver St. Project design will begin later this year with construction anticipated to begin in 2007.

The Oak Street Basin and Storm Drain Project has been identified in the ADMP as a 9.4 acre flood control stormwater structure located at the northeast corner of Hawes Road and Oak St. This location was chosen for its ability to take peak discharges from the Oak St. and Hawes Road storm drains before entering into the existing Thunder Mountain West Channel.

Las Sendas Sulfide Injection Station

As a separate, but adjacent project, this City of Mesa facility will be constructed just southeast of the McDowell Road Basin site. The facility will be about 600 feet south of McDowell Road and will be surrounded by an 8 foot high masonry wall with two rolling gates fronting Sossaman Road. The station will dispense ferrous chloride to control odor in the sewer system. The facility will typically be visited daily by City of Mesa staff and will have remote monitoring capability. Design is being coordinated with the McDowell Road Basin and Storm Drain project.

Project Schedule

	2005						2006						
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
Data Collection													
Field Surveys													
Geotechnical Investigation													
Storm System Analysis													
Utilities													
Public Involvement													
Initial Construction Plans													
Preliminary Construction Plans													
Pre-Final Plans													
Final Construction Plans													

Completed
In Progress
To Be Completed

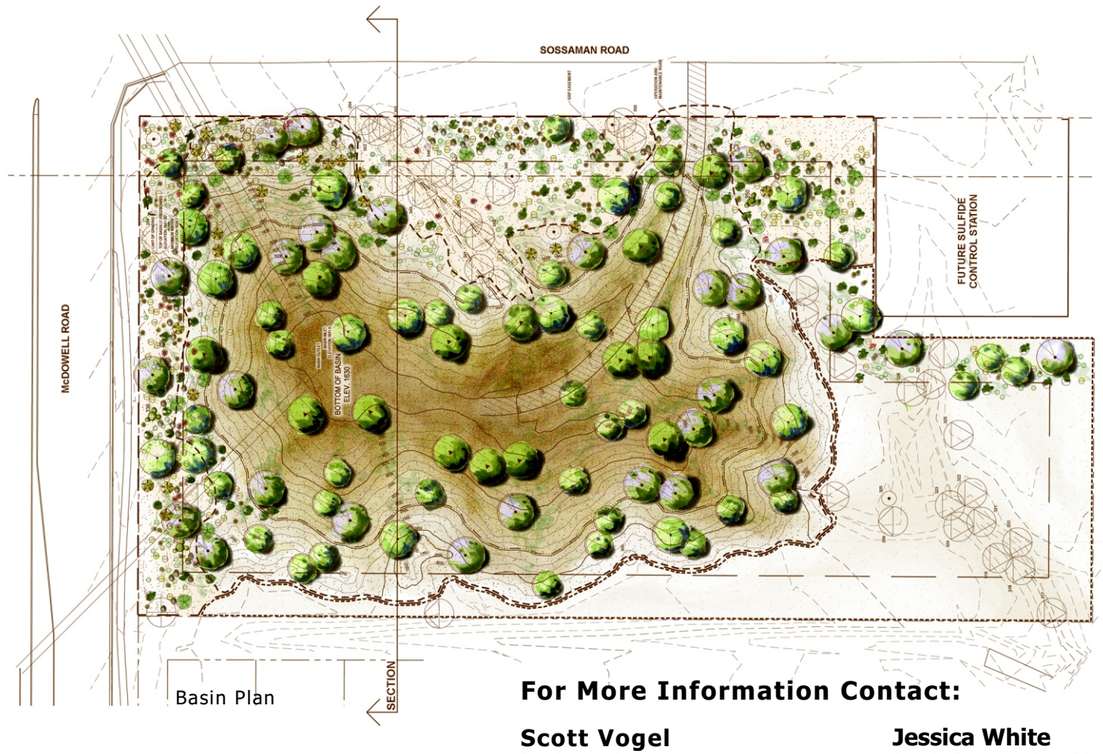
Stormwater Basin Cross-section

Landscape Considerations

The McDowell Road Basin is being designed in accordance with the ADMP and with the City of Mesa's Site Development Design Standards and Desert Uplands requirements, as well as with input from the community-based Project Aesthetics Advisory Committee and from our first public open house.

The stormwater basin has been designed to include the following features:

- The grading plan transitions into the existing landform and is designed to emulate the surrounding desert terrain. The overall shape of the basin is irregular and the slopes are designed to be gentle and natural, as opposed to anything with straight side slopes and a square form.
- The existing desert topsoil will be salvaged and replaced. This will aid in creating an undisturbed appearance of the basin while preserving the seed base and organic material in the soil.
- The landscape has been designed to screen views of the inlet and outlet structures and to provide a natural vegetative pattern to maintain the natural appearance of the site.
- Proposed plants for the site include only native plant species specific to the desert uplands area.
- Native hydroseed will be applied to all areas disturbed by the construction of the basin. The hydroseed mix will include trees, shrubs, grasses and wildflowers.
- Enhanced planting will be provided on the north and east sides of the basin site, along McDowell and Sossaman roads. In addition to hydroseed, this will include container trees (15 gallon size), shrubs and groundcovers that will be irrigated with an underground automatic irrigation system to aid in the establishment of the vegetation.
- Existing saguaros and salvageable Ironwood trees impacted by the construction of the basin will be salvaged and replanted on-site.
- Ironwood, Palo Verde and Native Mesquite species will be planted throughout the basin to help reestablish the native tree species found on the site.



Basin Plan

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